IN THE CLAIMS:

Please amend claims 1, 6-11, 17, 21, 23, 25, 27, and 29, and cancel claims 5, 15, 16, and 20 without prejudice as follows:

1. (Currently amended) An active smart antenna system comprising:

an antenna for receiving a signal;

a low noise amplifier for amplifying a signal received through the antenna so as to minimize a noise generation; and

a phase shifter for controlling a phase of the amplified signal,

wherein the antenna, the low noise amplifier, and the phase shifter are formed on one high resistance substrate that is essentially non-conductive,

the phase shifter comprises signal electrodes, ground electrodes, inductors respectively formed of the same conductive material, and an electron switch and a capacitor connected to the signal electrodes,

the electron switch is formed as a bare chip form which is attached onto one of the ground electrodes by physical bonding using a conductive adhesive, and

the inductors are stacked inside the high resistance substrate.

2. (Previously presented) The active smart antenna system of claim 1, wherein the high resistance substrate is one selected among a high resistance silicon substrate, a high resistance ceramic substrate, and a printed circuit board (PCB).

3. (Original) The active smart antenna system of claim 2, wherein the high resistance substrate is a substrate of two surfaces having signal electrodes for connecting upper and lower surfaces thereof.

4. (Previously presented) The active smart antenna system of claim 2, wherein the antenna is one of a patch antenna and a slot antenna.

5. (Canceled)

6. (Currently amended) The active smart antenna system of claim ~~5~~ 1, wherein the inductor is formed as a strip line structure or a spiral structure by a micro electro mechanical system (MEMS) technique.

7. (Currently amended) The active smart antenna system of claim ~~5~~ 1, wherein the electron switch ~~is formed as a bare chip form that~~ is connected to the signal electrodes by a bonding wire.

8. (Currently amended) The active smart antenna system of claim 7, wherein the electron switch ~~further~~ includes a polymeric protection material.

9. (Currently amended) The active smart antenna system of claim ~~5~~ 1, wherein the electron switch is formed at an etched part of the high resistance substrate after partially etching the high resistance substrate.

10. (Currently amended) The active smart antenna system of claim ~~5~~ 1, wherein the electron switch is ~~formed as a bare chip form~~ connected to the signal electrodes by a flip chip bonding technique.

11. (Currently amended) The active smart antenna system of claim 10, wherein the electron switch ~~further~~ includes a polymeric protection material.

12. (Previously presented) The active smart antenna system of claim 3, wherein the low noise amplifier is formed as a bare chip form connected to the signal electrodes by a bonding wire.

13. (Previously presented) The active smart antenna system of claim 3, wherein the low noise amplifier is formed as a bare chip form connected to the signal electrodes by a flip chip bonding technique.

14. (Previously presented) The active smart antenna system of claim 1, wherein the high resistance substrate is a Low temperature co-fired ceramic (LTCC) PCB.

15-16. (Canceled)

17. (Currently amended) A method for fabricating an active smart antenna system, the method comprising:

uniformly forming a conductive layer on one high resistance substrate that is essentially non-conductive;

patterning the conductive layer and thereby forming signal electrodes, ground electrodes, and inductors;

forming an electron switch connected to the signal electrodes on the ground electrodes and forming a capacitor connected to the signal electrodes; and

~~wherein~~ forming an antenna for receiving a signal, a low noise amplifier for amplifying a the signal received through the antenna so as to minimize a noise generation, and a phase shifter for controlling a phase of the amplified signal ~~are formed~~ on ~~one~~ the high resistance substrate ~~that is essentially non-conductive~~, wherein the electron switch is formed as a bare chip form which is attached onto one of the ground electrodes by physical bonding using a conductive adhesive and the inductors are stacked inside the high resistance substrate.

18. (Original) The method of claim 17, wherein the high resistance substrate is one selected among a high resistance silicon substrate, a high resistance ceramic substrate, and a printed circuit board (PCB).

19. (Original) The method of claim 18, wherein the high resistance substrate is a substrate of two surfaces having signal electrodes for connecting upper and lower surfaces thereof.

20. (Canceled)

21. (Currently amended) The method of claim ~~20~~ 17, wherein the electron switch is ~~formed as a bare chip form~~ connected to the signal electrodes by a bonding wire.

22. (Original) The method of claim 21, further comprising a step for forming a polymeric protection material for protecting the electron switch.

23. (Currently amended) The method of claim ~~20~~ 17, wherein the electron switch is ~~formed as a bare chip form~~ connected to the signal electrodes by a flip chip bonding technique.

24. (Original) The method of claim 23, further comprising a step for forming a polymeric protection material for protecting the electron switch.

25. (Currently amended) The method of claim ~~20~~ 17, wherein the electron switch is formed at an etched part of the high resistance substrate after partially etching the high resistance substrate.

26. (Original) The method of claim 25, further comprising a step for forming a polymeric protection material for protecting the electron switch.

27. (Currently amended) The method of claim ~~20~~ 17, ~~further comprising a step for forming an~~ wherein the antenna is formed by patterning the conductive layer.

28. (Previously presented) The method of claim 27, wherein the antenna is one of a patch antenna and a slot antenna.

29. (Currently amended) The method of claim ~~20~~ 17, further comprising a step for forming a low noise amplifier connected to the signal electrodes.